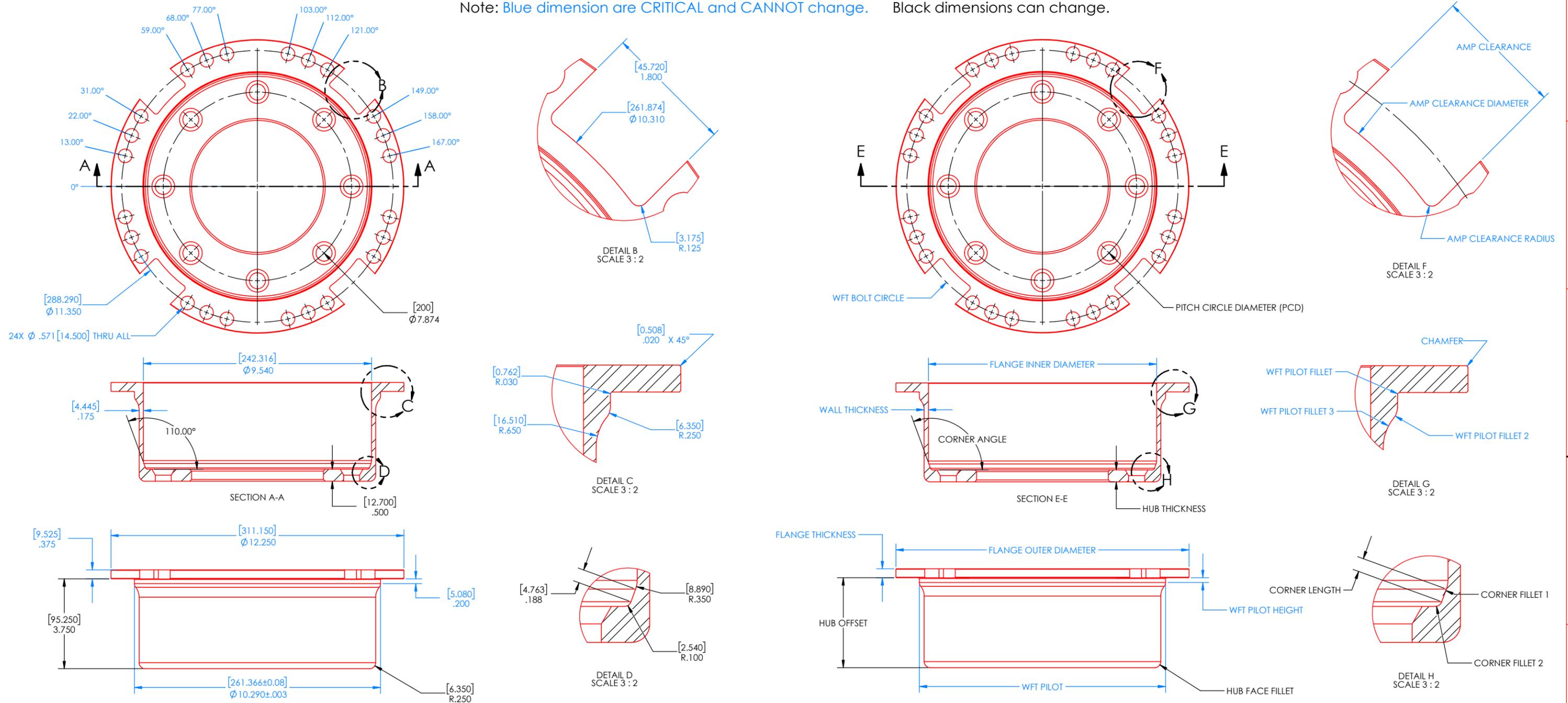


# LW-2T-20K Hub Adapter Design Guide (PCD 200+ mm)

Note: Blue dimension are CRITICAL and CANNOT change. Black dimensions can change.



It is essential that the adapters match the recommended guidelines. This will ensure the system can withstand the rated loads and provide the most accurate results. The critical features are shown in blue. Customers may change all other geometry. Examples of permitted changes are shown on the second sheet. This design guide is for vehicles with a PCD greater than or equal to 200 mm.

The "HUB THICKNESS" should not be less than 0.500 in (12.700 mm).

Detail D shows geometry that reduces the material stresses to increase the adapter fatigue life. The "CORNER ANGLE" should be between 105-115 degrees.

Michigan Scientific Corporation (MSC) machines hub adapters from 17-4 H1100 stainless steel. This material provides good insulation from brake heat. Alloy steels can be used but they will conduct brake heat more than the stainless steel. The material should have a yield strength of at least 890 MPa (130 ksi) and a hardness between 32 and 45 HRC.

MSC verifies all rim and hub adapter assemblies using FEA to simulate the SAE J328 wheel durability standard. This should be done with all adapter systems to verify the load ratings and fatigue life of the adapters. A LW-2T-20K transducer has a SAE J328 static load rating of 4000 lb (1815 kg). This should never be exceeded.

MSC can check your adapter designs at no cost. Contact MSC online at [michsci.com/contact-us](http://michsci.com/contact-us) or via phone at 1-231-547-5511.

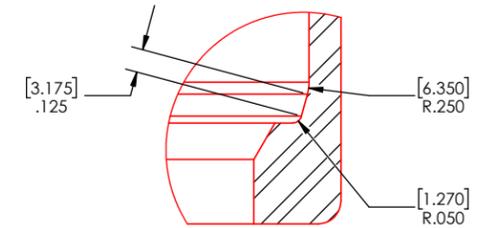
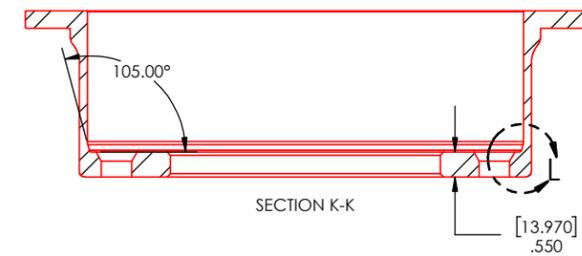
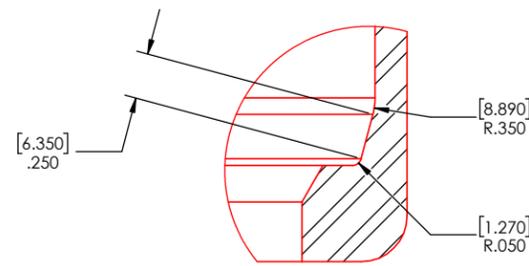
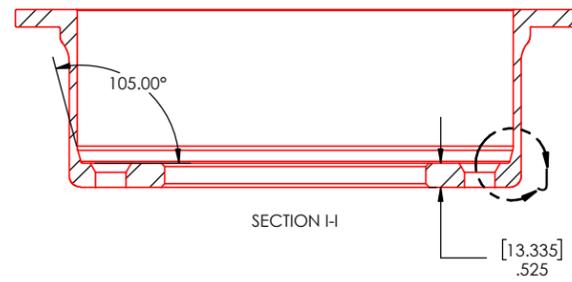
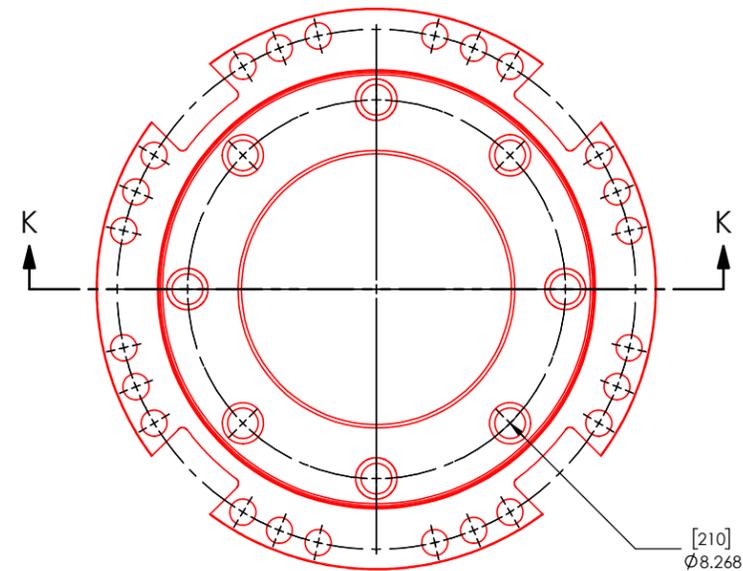
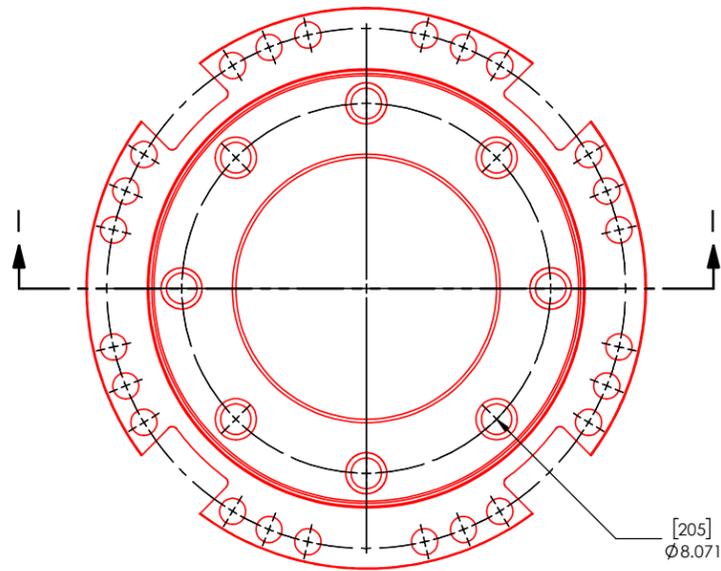
IMPORTANT: Consult MSC if your system uses telemetry.

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UNLESS OTHERWISE SPECIFIED:		DATE	NAME	MICHIGAN SCIENTIFIC CORPORATION
DIMENSIONS ARE IN INCHES (mm)		3/30/2020	JPSaley	8500 ANCE ROAD
TOLERANCES:				CHARLEVOIX, MICHIGAN 49720
XXX ± 0.010	DRAWN			www.michsci.com
XXX ± 0.005	CHECKED	4/1/2020	SKRudy	
XX ± 0.011	ENG APPR			PRODUCT LINE LW-2T-20K
FRACTIONAL ±	MFG APPR			CUSTOMER CODE
ANGULAR: MACH ±				PROJECT CODE
BEND ±				
WEIGHT				DESCRIPTION: Hub Adapter Design Guide
MATERIAL 17-4 H1100	PROPRIETARY AND CONFIDENTIAL			SIZE DWG. NO.
FINISH	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MICHIGAN SCIENTIFIC CORPORATION. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MICHIGAN SCIENTIFIC CORPORATION IS PROHIBITED.			REV
				D LW-2T-20K Hub Adapter Design Guide 200+ mm
				SCALE: 1:2 SHEET 1 OF 2

# LW-2T-20K Hub Adapter Design Guide

Note: Blue dimension are CRITICAL and CANNOT change. Black dimensions can change.



It is essential that the adapters match the recommended guidelines. This will ensure the system can withstand the rated loads and provide the most accurate results. The critical features are shown in blue. Customers may change all other geometry. Examples of permitted changes are shown above.

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DIMENSIONS ARE IN INCHES (mm)	DRAWN	3/30/2020	JPS/ley	PRODUCT LINE	LW-2T-20K
TOLERANCES:	CHECKED	-	-	CUSTOMER CODE	PROJECT CODE
XXX ±.0010	ENG APPR	-	-	Hub Adapter Guidelines	
XX ±.005	MFG APPR	-	-	SIZE	DWG. NO. REV
XX ±.01	WEIGHT	-	-	D LW-2T-20K Hub Adapter	
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FINISH	SHEET 2 OF 2				